

WHAT IS CLAIMED IS:

1. A light guide panel mounted to grooves in a mold frame of a backlight unit with a light source to guide light to the display panel, comprising:

5 a plate-shaped body;

at least one light guide projection for fitting said light guide panel disposed on left and/or right side of said plate-shaped body, having an upper surface, a lower surface, a first side surface disposed parallel to the left and/or right side of said plate-shaped body, a second side surface disposed adjacent the first side surface and remote from the light source, and a third side surface disposed adjacent to the first side surface and the light source;

a plurality of patterns formed on a lower surface of said plate-shaped body to uniformly project light; and

the upper surface and the lower surface of said light guide projection being disposed remote as much as in predetermined intervals, respectively from planes extending from said plate-shaped body.

2. The light guide panel according to claim 1, wherein said light guide projection further includes an inclined surface disposed where the third side surface meets the left and/or right side of said plate-shaped body.

3. The light guide panel according to claim 1, wherein at least one of corners between the first side surface and the second and the third side surfaces of said

light guide projection is rounded and the mold frame has grooves corresponding to the rounded corner shape of said light guide projection.

4. The light guide panel according to claim 2, wherein at least one of
5 corners between the first side surface and the second and the third side surfaces of said light guide projection is rounded and the mold frame has grooves corresponding to the rounded corner shape of said light guide projection.

5. The light guide panel according to claim 1, wherein at least one of
10 corners between the first side surface and the second and the third side surfaces of said light guide projection is chamfered and the mold frame has grooves corresponding to the chamfered corner shape of said light guide projection.

6. The light guide panel according to claim 2, wherein at least one of
15 corners between the first side surface and the second and the third side surfaces of said light guide projection is chamfered and the mold frame has grooves corresponding to the chamfered corner shape of said light guide projection.

7. A light guide panel for a flat panel display device, comprising:
20 a plate-shaped body; and
a pair of light guide projections disposed on the respective middle of left and right sides of said plate-shaped body, wherein the light guide projections are thinner than said plate-shaped body.

8. The light guide panel according to claim 7, wherein an interval between an upper surface of said plate-shaped body and an upper surface of each of said light guide projections is same as an interval between a lower surface of said plate-shaped body and a lower surface of each of said light guide projections.

9. The light guide panel according to claim 7 wherein an interval between an upper surface of said plate-shaped body and an upper surface of each of said light guide projections is different from an interval between a lower surface of said plate-shaped body and a lower surface of each of said light guide projections.

10. The light guide panel according to claim 7, wherein the flat panel display device includes a window-shaped mold frame having a pair of grooves formed respectively on its left side and right side and a light source disposed in its lower side;

wherein the light guide panel is mounted on the mold frame so that a pair of said light guide projections are fit respectively to a pair of said grooves; and

wherein each of the light guide projections further includes an inclined surface between the left or right side of said plate-shaped body and a side thereof adjacent to said light source.

11. The light guide panel according to claim 7, wherein shape of said light guide projection is rectangular.

12. A backlight unit, comprising:

a mold frame;

a light source mounted in a side of said mold frame; and

a light guide panel for guiding light to the front having light guide projections

5 disposed on left and right sides thereof,

wherein said mold frame has grooves formed in left side and right side thereof adjacent to said light source, for the light guide projections of said light guide panel; and

wherein upper surface and lower surface of the light guide projections are disposed remote as much as predetermined intervals, respectively from planes

10 extending from said light guide panel.

13. The backlight unit according to claim 12, further comprising:

a reflecting sheet disposed under said light guide panel to reflect light projected from said light source, to said light guide panel;

15 a diffusing sheet disposed on said light guide panel to uniformly diffuse light guided from said light guide panel;

a plurality of prism sheets disposed on said diffusing sheet to enhance the luminance of light passed through said diffusing sheet; and

a protecting sheet disposed on said prism sheets to protect said prism sheets.

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14. The backlight unit according to claim 12, wherein each of the light guide projections of said light guide panel further includes an inclined surface on a side adjacent to said light source.

15. The backlight unit according to claim 13, wherein each of the light guide projections of said light guide panel further includes an inclined surface on a side adjacent to said light source.

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16. The backlight unit according to claim 12, wherein at least one of corners of the light guide projections is rounded.

17. The backlight unit according to claim 13, wherein at least one of corners
10 of the light guide projections is rounded.

18. The backlight unit according to claim 12, wherein at least one of corners of said light guide projections is chamfered.

19. The backlight unit according to claim 13, wherein at least one of corners
15 of said light guide projections is chamfered.

20. A liquid crystal display device, comprising:

a housing having an open hole;

20 a display panel disposed in said housing to display images through the open hole of said housing;

a backlight unit disposed behind said display panel, including a mold frame, a light source mounted in a side of the mold frame, a light guide panel for guiding light

projected from the light source, to the front of said display panel; and

a top chassis combined with the mold frame of said backlight unit to fixedly hold the light guide panel and said display panel,

wherein the mold frame has grooves formed in left and right sides thereof

5 adjacent to a side thereof on which the light source is disposed,

wherein the light guide panel has light guide projections disposed on left and right sides for the grooves of the mold frame; and

wherein upper surface and lower surface of the light guide projections are disposed remote as much as predetermined intervals, respectively from planes

10 extending from upper surface and lower surface of the light guide panel.

21. The liquid crystal display device according to claim 20, wherein said backlight unit further includes:

a reflecting sheet disposed under the light guide panel to reflect light projected
15 from the light source, to the light guide panel;

a diffusing sheet disposed on the light guide panel to uniformly diffuse light guided from the light guide panel;

a plurality of prism sheets disposed on said diffusing sheet to enhance the luminance of light passed through said diffusing sheet; and

20 a protecting sheet disposed on said prism sheets to protect the prism sheets.

22. The liquid crystal display device according to claim 20, wherein at least one of corners of the light guide projections is rounded.

23. The liquid crystal display device according to claim 21, wherein at least one of corners of the light guide projections is rounded.

5 24. The liquid crystal display device according to claim 20, wherein at least one of corners of the light guide projections is chamfered.

25. The liquid crystal display device according to claim 21, wherein at least one of corners of the light guide projections is chamfered.

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26. The liquid crystal display device according to claim 20, wherein each of the light guide projections of the light guide panel further includes an inclined surface on a side adjacent to the light source.

15 27. The liquid crystal display device according to claim 21, wherein each of the light guide projections of the light guide panel further includes an inclined surface on a side adjacent to the light source.